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EXAMINER

GOODWIN, DAVID J

ART UNIT

PAPER NUMBER

2818

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 3/29/2010 have been fully considered but they are not persuasive.
2. The applicant argues that Chvukula does not teach coating the nanoparticles with surfactant and said surfactant coating critically distinguishes the claimed invention from the prior art.
3. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., surfactant coating) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
4. The applicant will note that claim 53 does state the dielectric layer comprises surfactant coated particles but rather said surfactant coating is part of the process used to deposit a layer of particles into an aggregated layer. As is made clear in the applicant's specification said surfactant may be removed (paragraph 9).

The applicant's argument that the surfactant coating prevents aggregation of the nanoparticles in the dielectric layer is flawed because, as is shown in the applicant's figures 9, 10, 19, 20, 23, and 24), the particles aggregate when the solvent is removed. Clearly the surfactant is not preventing aggregation of the nanoparticles in the aggregated nanoparticle dielectric layer. As noted previously, process steps must

Art Unit: 2818

distinguish the product rather than the process (and constituent intermediate structures) of making the product.

Note that a “product by process” claim is directed to the product per se, no matter how actually made. See *In re Thorpe et al.*, 227 USPQ 964 (CAFC, 1985) and related case law cited therein which make it clear that it is the final product per se which must be determined in a “product by process” claim, and not the patentability of the process, and that, as here, an old or obvious product produced by a new method is not patentable as a product, whether claimed in “product by process” claims or not. As stated in *Thorpe*,

- a. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972); *In re Pilkington*, 411 F.2d 1345, 1348, 162 USPQ 145, 147, (CCPA 1969); *Buono v. Yankee Maid Dress Corp.*, 77 F.2d 274, 279, 26 USPQ 57, 61 (2d. Cir 1935).

Note that Applicant bears the burden of proof in such cases as the above case law makes clear.

5. The applicant argues that the examiner must make a searching comparison of the claimed invention, including a limitations, with the prior art.
6. The applicant will note that the examiner made a searching comparison of the claimed invention, including a limitations, with the prior art. Said comparison resulted in the rejection, including motivation and reasoning, dated 12/28/2009.
7. The applicant argues that motivation for using BaTiO<sub>3</sub> as the nanoparticles is insufficient.

Art Unit: 2818

8. The applicant will note that the motivation derives from the Matijevic reference that teaches that barium titanate particles are used to make advanced devices.

9. The applicant argues that it is evident that the claimed invention differs from the references of record.

10. The applicant does not explain or imply how the claimed invention differs.

11. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID GOODWIN whose telephone number is (571)272-8451. The examiner can normally be reached on Monday through Friday, 9:00am through 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Loke can be reached on (571)272-1657. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2818

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djg

/STEVEN LOKE/

Supervisory Patent Examiner, Art Unit 2818